

#### IV. TRANSPORTATION CONTROL MEASURES (TCMs)

##### A. Timely Implementation of TCMs

Transportation Control Measures (TCMs) are specific transportation projects and programs committed to help improve air quality. TCMs are required by the federal Clean Air Act in non-attainment areas that are classified as "severe" and above (§7511a(d)(1)), and provide multiple benefits, including reductions of emissions and improvements to mobility and accessibility and can help support better urban form.

Southern California has the worst air quality in the nation and must implement all reasonably available measures to support attainment of federal and state air quality standards. The unique challenges in Southern California have called for an inclusive and flexible TCM development, implementation, and monitoring process, which is included in the SIP for the South Coast Air Basin. Within the South Coast Air Basin, TCM-type projects and programs that have implementation funding—right-of-way acquisition or construction funding for transit, non-motorized or HOV projects or program funding for behavioral or informational programs—within the first two years of the RTIP are committed TCMs. This ongoing rollover process has committed hundreds of projects and programs, which collectively will remove tons of air pollution each day from Southern California's skies.

##### B. TCM Categories and Definitions

A TCM-type project or program is any transportation project or program that reduces vehicle use or changes traffic flow or congestion conditions for the purposes of reducing emissions from transportation sources and improving air quality.

TCM-type Projects and Programs: Only those projects meeting the specifications defined in the prevailing SIP are designated as TCMs. These categories define the region's transportation strategies and control measures to reduce air pollution emissions from on-road mobile sources and provide guidance on the types of projects that can be considered in the event that a TCM substitution becomes necessary.

In the SCAG region, two ozone non-attainment areas have TCMs: the South Coast Air Basin (SCAB) and the Ventura County portion of the South Central Coast Air Basin (VC/SCCAB). The State Implementation Plans (SIPs) for both areas are being revised.

For the VC/SCCAB, the current TCM categories are: Clean Fuel Bus Fleets and Support Facilities; Improved Public Transit; Bicycle and Pedestrian Facilities; and Traffic Flow Improvements. A specific list of projects, consistent with the TCM categories, is listed by VCTC in each RTIP.

In the South Coast Air Basin (SCAB), TCMs are defined in three main categories:

- Transit and non-motorized modes;
- HOV lanes and their pricing alternatives; and
- Information-based strategies.

Committed TCMs: As stated above, a TCM-type project or program becomes a *committed* TCM once funds have been programmed by the CTCs in the first two years of the RTIP.

Committed TCM projects have funds programmed for right-of-way acquisition or for post-design implementation in the first two years of the prevailing RTIP or RTIP amendment. Projects with funds programmed for PE only are not TCMs. If a TCM project or program is programmed through an RTIP amendment, then the TCM project or program becomes a committed TCM that must be operational by the completion date provided in the amendment.

TCMs for Timely Implementation Reporting: Once a TCM project or program is committed for implementation in the first two years of the RTIP, the committed TCM project must be operational or implemented by the completion date committed to in the prevailing RTIP or RTIP amendment. The completion date for committed TCMs will be used to track timely implementation for the Timely Implementation Report, submitted as part of each Conformity Determination. The primary analysis for Timely Implementation Reporting will be done as part of the two-year RTIP cycle, although completion status of committed TCM projects must be continuously monitored to ensure that committed TCMs are on schedule.

Completed, operational TCM projects will be included in the TCM Timely Implementation Report in the Conformity Determination directly subsequent to project completion, and then completed projects will be removed from the list. SCAG will maintain an internal list of completed TCM projects.

SCAG is improving the RTIP database to include new and improved reporting and project monitoring functionality for TCMs. Every project designated as a TCM will carry with its record the date on which it was proposed and the project completion date anticipated at that time. These two date records will carry forward in the new RTIP database, and be a part of subsequent implementation reports, and will be reported to federal and other agencies. Furthermore, SCAG is refining the list of currently committed TCMs and once SCAG has received input from the CTCs, SCAG plans to present the list to the Transportation Conformity Working Group in autumn of 2007 for further review and comments. The finalized list, including the committed completion date of each project will provide the basis for the Timely Implementation Report for the 2008 RTIP.

TCM projects require priority in funding (with special claim on CMAQ and STP funds), as well as demonstration of timely implementation, in accordance with the schedule provided in the RTIP. This means that in the event of a funding shortfall, TCM projects must be funded and implemented before non-TCM projects. In addition, all projects properly designated as TCMs in the first two years must be tracked for timely implementation, and, in the event that a project is delayed or cancelled, substitute projects that provide equivalent air quality improvement benefits must be initiated in a timely manner.

Once a TCM project is committed for implementation in an RTIP, the implementation status must be reported on in subsequent RTIPs until the project has been completed. All committed TCMs must be implemented on schedule to avoid a conformity lapse. If implementation obstacles arise, the obstacles must be overcome. Any development affecting implementation of a committed TCM will be reported to SCAG by the CTCs on an on-going basis. In the event that a committed TCM project encounters an obstacle to implementation, the implementing agency, SCAG, and the Transportation Conformity Working Group (TCWG) will work together to overcome the delay.

### C. TCM Rollover Process

TCMs Rollover Process: Approximately every two years, as the RTIP is updated, additional TCMs will be added to the South Coast AQMP/SIP based on the new RTIP and the RTIP Guidelines. The "rollover" of TCMs will update the AQMP/SIP to include new projects in addition to ongoing projects from previous RTIPs. The TCMs "rolled over" will be monitored for adherence to the schedule established in the RTIP at the time a project is identified as a committed TCM. The identification of TCMs from the RTIP shall be agreed upon by both SCAG and the appropriate CTCs.

The rollover of the RTIP must be adopted by SCAG's Regional Council, in accordance with the RTIP adoption process, as described below.

- The Draft RTIP is reviewed by various SCAG Committees, Task Forces, and Working Groups, such as the standing Transportation and Communication Committee;
- The Transportation Conformity Working Group (TCWG), which serves as the interagency consultation group, reviews the proposed TCMs and RTIP;
- Public notification is provided through newspapers in the affected sub-regions as well as on SCAG's website;
- Draft RTIP materials are distributed, with appropriate cover letters, to approved public libraries and facilities and also made available on SCAG's website for access by the public;
- Input received is compiled and analyzed, and responses to comments are provided by SCAG Staff, and made available to the public;
- A summary of comments received during the public comment period along with SCAG's responses, following the close of the public comment period, is incorporated into the final RTIP;
- The Final RTIP is adopted by SCAG's Regional Council;
- SCAG's adopted RTIP is submitted to the State for funding approval and to the federal agencies (FHWA, FTA and EPA) for conformity approval.

### D. Substitution of Individual TCMs

The CTCs and/or project sponsors shall notify SCAG when a TCM project cannot be delivered or will be significantly delayed. SCAG and the CTCs will identify and evaluate possible replacement measures for individual substitutions, through the TCWG, which includes members from all affected jurisdictions, federal, state and/or local air quality agencies and transportation agencies.

Substitution of individual TCMs will follow the process specified in the CAA section 176(c). Section 176(c) of the CAA allows for the substitution of individual TCMs if certain conditions are met. These include:

- "(i) if the substitute measures achieve equivalent or greater emissions reductions than the control measure to be replaced, as demonstrated with an emissions impact analysis that is consistent with the current methodology used for evaluating the

replaced control measure in the implementation plan;  
"(ii) if the substitute control measures are implemented-

- "(I) in accordance with a schedule that is consistent with the schedule provided for control measures in the implementation plan; or  
"(II) if the implementation plan date for implementation of the control measure to be replaced has passed, as soon as practicable after the implementation plan date but not later than the date on which emission reductions are necessary to achieve the purpose of the implementation plan;

"(iii) if the substitute and additional control measures are accompanied with evidence of adequate personnel and funding and authority under State or local law to implement, monitor, and enforce the control measures;

"(iv) if the substitute and additional control measures were developed through a collaborative process that included--

- "(I) participation by representatives of all affected jurisdictions (including local air pollution control agencies, the State air pollution control agency, and State and local transportation agencies);  
"(II) consultation with the Administrator; and  
"(III) reasonable public notice and opportunity for comment; and

"(v) if the metropolitan planning organization, State air pollution control agency, and the Administrator concur with the equivalency of the substitute or additional control measures.

In addition to the conditions above, the substitute project shall be in the same air basin and preferably be located in the same geographic area and preferably serve the same demographic subpopulation as the TCM being replaced.

A substitution does not require a new conformity determination or a formal SIP revision. Adoption of the new TCM in coordination with EPA concurrence will rescind the original TCM and apply the new measure.

SCAG will maintain documentation of all approved TCM substitutions. The documentation will provide the emissions analysis as well as a description of the substitution process, including a list of the committee or working group members, public hearing and comment process, and evidence of SCAG adoption. Compliance with the provisions listed above will ensure adequate emissions reductions are achieved in a TCM substitution.

**Table IV-A: TCM Project Categories in the South Coast Air Basin (SCAB)**

<b>Project Description</b>	<b>Program Codes</b>
<b>A. High Occupancy Vehicle Measures</b> <i>HOV projects and their pricing alternatives.</i>	
▪ New HOV Lanes – Extensions and Additions to Existing Facilities	CAN69, CAX69, CAY69
▪ New HOV Lanes – With New Facility Projects	CAN69, CAX69, CAY69
▪ New HOV Lanes -- With Facility Improvement Projects	CAN69, CAX69, CAY69
▪ HOV Bypasses, Connectors, and New Interchanges with Ramp Meters	CAN69, CAX69, CAY69, CAN66, CAX66, CAY66, CAN71, CAX71, CAY71
▪ High Occupancy Toll (HOT) Lanes and Pricing Alternatives	CAN69, CAX69, CAY69
<b>B. Transit and System Management Measures</b> <i>Bus, rail and shuttle transit expansion and improvements; park and ride lots and inter-modal transfer facilities; bicycle and pedestrian facilities; railroad consolidation programs such as the Alameda Corridor, grade separation projects, channelization, over-passes, underpasses; traffic signalization; intersection improvements.</i>	
<b>Transit</b>	
▪ Rail Track – New Lines	TRN92, LRN92, RAN92
▪ Rail Track – Capacity Expansion of Existing Lines	TRN92, LRN92, RAN92, TRR14, TRN14
▪ New Rolling Stock Acquisition -- Rail Cars and/or Locomotives	CON94, CON93, COR17, COR16
▪ Express Busways – Bus Rapid Transit and Dedicated Bus Lanes	
▪ Buses – Fleet Expansion	BUN94, BUN93
▪ Shuttles and Paratransit Vehicles – Fleet Expansion	PAN94, PAN93
<b>Intermodal Transfer Facilities</b>	
▪ Rail Stations - New	TRNH6
▪ Rail Stations - Expansion	TRRH6
▪ Park & Ride Lots – New	TDN64
▪ Park & Ride Lots – Expansion	TDR64
▪ Bus Stations & Transfer Facilities – New	TRNH6
▪ Bus Stations & Transfer Facilities – Expansion	TRRH6
<b>Non-motorized Transportation Mode Facilities</b>	
▪ Bicycle & Pedestrian Facilities - New	NCN25
▪ Bicycle & Pedestrian Facilities - Expansion	NCR25
▪ Bicycle Facilities - New	NCN26

▪ Bicycle Facilities - Expansion	NCR26
▪ Pedestrian Facilities - New	NCN27
▪ Pedestrian Facilities - Expansion	NCR27
<b>C. Information-based Transportation Strategies</b>  <i>Programs that promote and popularize multi-modal commute strategies to maximize alternatives to single-occupancy vehicle commute trips; marketing and promoting the use of HOV lanes or rail lines to the general public; educating the public regarding cost, locations, accessibility and services available at Park and Ride lots; promoting and marketing vanpool formation and incentive programs; promoting ride-matching services through the Internet and other means of making alternative travel option information more accessible to the general public; Urban Freeway System Management improvements; Smart Corridors System Management programs; Congestion Management Plan-based demand management strategies; county-/corridor-wide vanpool programs; seed money for transportation management associations (TMAs); and TDM demonstration programs/projects eligible for programming in the RTIP.</i>	
▪ Marketing for Rideshare Services and Transit/TDM/Intermodal Services	TDM20, TDM24
▪ Intelligent Transportation Systems/Control System Computerization	Various, See TDM codes list
▪ Telecommuting Programs/Satellite Work Centers	TDM24
▪ Real-time Rail, Transit, or Freeway Information Systems (changeable message signs)	ITS05, ITS01, ITS12

The county transportation commissions need to accurately enter the program code associated with TCMs for each project in the RTIP database. The RTIP Guidelines provide a listing of these codes.

**Additional TCM/RTIP Listing Notes (pertains only to SCAB):**

- Transit expansions to add service or vehicles are TCMs.
- Transit projects using funds for operating expenses are **not** TCMs.
- Transit bus replacement projects are **not** TCMs
- Safety and maintenance projects are **not** TCMs.
- Transit alternative fuel replacement projects are **not** TCMs.
- Transit replacement and maintenance projects should be listed separately in the RTIP, not in conjunction with the purchase of new additional transit buses.
- In the SCAB, any transit project is either a TCM project or an Exempt project.

Projects may be eligible for CMAQ funding, but not be TCMs (e.g., replacement of an old bus with an alternative fuel bus).